Message

From: Tonnesen, Gail [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=74A573ADAC664C25B77C5B4DAE45A54C-TONNESEN, GAIL]
Sent: 6/3/2014 1:39:55 PM
To: Thomas Ayers - NOAA Federal [thomas.ayers@noaa.gov]; Richard Lataitis - NOAA Federal [richard.lataitis@noaa.gov]
CC: Bruce Bartram - NOAA Affiliate [bruce.bartram@noaa.gov]; Russell Schnell - NOAA Federal [russell.c.schnell@noaa.gov]; Reddy - CDPHE, Patrick [patrick.reddy@state.co.us]; Daniel Wolfe - NOAA Affiliate [daniel.wolfe@noaa.gov]
Subject: RE: FW: Stratospheric O3 intrusion likely to affect Colorado surface concentrations tomorrow

The BAO webpage is showing real-time O3 data again. There is nothing unusual in the data yet, but perhaps we will see indications of the intrusion later today.

Thanks!
Gail
303-312-6113

From: Thomas Ayers - NOAA Federal [mailto:thomas.ayers@noaa.gov]
Sent: Monday, June 02, 2014 4:33 PM
To: Richard Lataitis - NOAA Federal
Cc: Bruce Bartram - NOAA Affiliate; Russell Schnell - NOAA Federal; Reddy - CDPHE, Patrick; Daniel Wolfe - NOAA Affiliate; Tonnesen, Gail
Subject: Re: FW: Stratospheric O3 intrusion likely to affect Colorado surface concentrations tomorrow

Hi Rich,

I'm not sure of the measurements but am planning on going to the tower tomorrow. Bruce will probably have the best answer since Dan is still out on vacation. If I don't see Bruce at the tower I'll call and ask him if there's anything I can do.

Tom

On Mon, Jun 2, 2014 at 1:57 PM, Richard Lataitis - NOAA Federal <richard.lataitis@noaa.gov> wrote:
Bruce, Tom or Russ, Can any of you help answer this question? Thanks, Rich

On Mon, Jun 2, 2014 at 12:57 PM, Tonnesen, Gail <Tonnesen.Gail@epa.gov> wrote:
Hi Rich,

I noticed that the BAO tower webpage has not reported any data since about 22:00 May 31, and that no surface O3 data has been reported during May. Do you know if surface O3 data is being collected? There is a possibility of a stratospheric intrusion Tuesday-Wednesday this week, and the real time BAO date is very useful.

Thanks,
Gail

Gail Tonnesen, Ph.D.
EPA Region 8 - Air Program

1595 Wynkoop St.
Denver, CO 80202
303-312-6113

From: Reddy - CDPHE, Patrick [mailto:patrick.reddy@state.co.us]
Sent: Monday, June 02, 2014 10:41 AM
To: Tonnesen, Gail; Brad Pierce; Andrew Langford-NOAA Federal; pfister@ucar.edu; Pierce', 'GORDON; Christoph Senff; Crawford, James H. (LARC-E303); Pickering, Kenneth E. (GSFC-6140); Frank M. Flocke <ffl@ucar.edu>; Scott Landes - CDPHE
Subject: Stratospheric O3 intrusion likely to affect Colorado surface concentrations tomorrow

Hi all,

A potent little shortwave is likely to bring streamers of stratospheric air to 600 mb over Colorado on Tuesday. Afternoon mixing to about 550 mb and lee wave phenomena in the lee of the Divide will allow some of this air to mix to ground-level sites beginning at 18Z on Tuesday June 3, with the highest impacts expected at Gothic, RMNP, Manitou Springs, the Air Force Academy, and basically most of the Front Range foothills and plains sites. The streamers should also impact southeast WY. There could be impacts in some areas of Utah as well.

The wildcard at the moment is how much lower stratospheric O3 is available for entrainment into the streamers. Brad Pierce's IDEA International tool confirms the possibility of intrusion impacts on Tuesday, but it looks like the center of this moderate sized trough which is off of California is not yet covered by GOES or GOME O3 products.

If we think there is a possibility of exceedances on Tuesday, we will issue an advisory or action day for O3 (later today or tomorrow AM). Blowing dust advisories are also being considered.

Regards,

--
Patrick J. Reddy
Senior Air Quality Meteorologist
Modeling, Meteorology, and Emissions Inventory Unit Technical Services Program Air Pollution Control Division Colorado Department of Public Health and Environment
APCD-TS-B1
4300 Cherry Creek Drive South
Denver, CO 80246-1530
303-692-3239| patrick.reddy@state.co.us

--
Richard Lataitis

Deputy Director
Physical Sciences Division
Earth System Research Laboratory
NOAA Office of Oceanic and Atmospheric Research
303-497-6523 (Office)
303-549-2845 (Cell)
303-497-6101 (Fax)
www.esrl.noaa.gov/psd/